

IN THE CLAIMS:

Claim 31 was previously cancelled. Claims 1, 2, 4-9, 15, 16, 18-32, 34, 40, 43 and 44 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently amended) A melt-pourable explosive composition comprising:  
30 weight percent to 70 weight percent of at least one ~~or more~~ organic binders binder selected from the group consisting of mononitro aromatics and dinitro aromatics, the at least one ~~or more~~ organic binders binder collectively exhibiting a total energy of detonation lower than trinitrotoluene and collectively having a total melting point in a range of 80°C to 115°C; and  
30 weight percent to 70 weight percent of at least one ~~or more~~ oxidizers, oxidizer,  
wherein the melt-pourable explosive composition is pourable at a temperature in a range of 80°C to 115°C, and  
wherein at least 95 weight percent of the melt-pourable explosive composition comprises a combination of the at least one ~~or more~~ organic binders binder and the at least one ~~or more~~ oxidizers, oxidizer.
2. (Currently amended) The melt-pourable explosive composition of claim 1,  
wherein the at least one ~~or more~~ organic binders comprise binder comprises at least one mononitro aromatic compound and at least one dinitro aromatic compound.
3. (Previously presented) The melt-pourable explosive composition of claim 1,  
wherein the mononitro aromatics each comprise one nitrocarbon moiety and wherein the dinitro aromatics each comprise two nitrocarbon moieties.

4. (Currently amended) The melt-pourable explosive composition of claim 1, wherein the at least one ~~or more organic binders comprise~~ binder comprises at least one member selected from the group consisting of mononitro-substituted and dinitro-substituted phenyl alkyl ethers.

5. (Currently amended) The melt-pourable explosive composition of claim 1, wherein the at least one ~~one or more binders comprise~~ organic binder comprises at least one member selected from the group consisting of 2,4-dinitroanisole, 2,4-dinitrophenetole, and 4-methoxy-2-nitrophenol.

6. (Currently amended) The melt-pourable explosive composition of claim 1, wherein the at least one ~~or more binders comprise~~ organic binder comprises 2,4-dinitroanisole.

7. (Currently amended) The melt-pourable explosive composition of claim 1, wherein the at least one ~~or more binders comprise~~ organic binder comprises an N-alkyl-nitroaniline processing aid.

8. (Currently amended) The The melt-pourable explosive composition of claim 1, wherein the at least one ~~or more binders comprise~~ organic binder comprises N-methyl-nitroaniline as a processing aid.

9. (Currently amended) The melt-pourable explosive composition of claim 1, wherein the at least one ~~or more binders comprise~~ organic binder comprises at least one processing aid selected from the group consisting of N-alkyl nitroaniline and N-aryl-nitroaniline, the at least one processing aid accounting for not more than 1 weight percent of the melt-pourable explosive composition.

10. (Previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition undergoes an onset of thermal decomposition at a temperature that is at least 55.5°C higher than the temperature at which the melt-pourable explosive composition becomes pourable.

11. (Previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition exhibits a card gap value of less than 121.

12. (Previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition exhibits a card gap value of less than 101.

13. (Previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition exhibits a dent depth in a range of 0.754 cm to 0.922 cm.

14. (Previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition has a total energy of detonation of 7.1 kJ/cc to 8.7 kJ/cc.

15. (Currently amended) A melt-pourable explosive composition comprising:  
30 weight percent to 70 weight percent of at least one ~~or more~~ organic binders binder selected from the group consisting of mononitro aromatics and dinitro aromatics, the at least one ~~or more~~ organic binders binder collectively exhibiting a total energy detonation lower than trinitrotoluene and collectively having a total melting point in a range of 80°C to 115°C; and  
30 weight percent to 70 weight percent of at least one ~~or more~~ inorganic oxidizers, oxidizer, wherein the melt-pourable explosive composition is pourable at a temperature in a range of 80°C to 115°C, and  
wherein at least 95 weight percent of the melt-pourable explosive composition comprises a combination of the at least one ~~or more~~ organic binders binder and the at least one ~~or more~~ inorganic oxidizers, oxidizer.

16. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one ~~or more~~ organic binders comprise binder comprises at least one mononitro aromatic compound and at least one dinitro aromatic compound.

17. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the mononitro aromatics each comprise one nitrocarbon moiety and wherein the dinitro aromatics each comprise two nitrocarbon moieties.

18. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one ~~or more~~ organic binders comprise binder comprises at least one member selected from the group consisting of nitrotoluenes, dinitrotoluenes, and dinitronaphthalenes.

19. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more organic compounds comprise binder comprises at least one member selected from the group consisting of nitrophenols, dinitrophenols, mononitroanilines, and dinitroanilines.

20. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more organic binders comprise binder comprises at least one member selected from the group consisting of mononitro-substituted and dinitro-substituted phenyl alkyl ethers.

21. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more binders comprise organic binder comprises at least one member selected from the group consisting of 2,4-dinitroanisole, 2,4-dinitrophenetole, and 4-methoxy-2-nitrophenol.

22. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more binders comprise organic binder comprises 2,4-dinitroanisole.

23. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more organic binders comprise binder comprises at least one heterocyclic compound.

24. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one or more binders comprise organic binder comprises an N-alkyl-nitroaniline processing aid.

25. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more binders comprise~~ organic binder comprises N-methyl-nitroaniline as a processing aid.

26. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more binders comprise~~ organic binder comprises an N-aryl-nitroaniline processing aid.

27. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more binders comprise~~ organic binder comprises at least one processing aid selected from the group consisting of N-alkyl nitroaniline and N-aryl-nitroaniline, the at least one processing aid accounting for not more than 1 weight percent of the melt-pourable explosive composition.

28. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more inorganic oxidizers comprise~~ oxidizer comprises at least one member selected from the group consisting of perchlorates and nitrates.

29. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more inorganic oxidizers comprise~~ oxidizer comprises at least one perchlorate selected from the group consisting of ammonium perchlorate, sodium perchlorate, and potassium perchlorate.

30. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~at least one or more inorganic oxidizers comprise~~ oxidizer comprises at least one nitrate selected from the group consisting of ammonium nitrate, sodium nitrate, strontium nitrate, and potassium nitrate.

31. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one ~~or more inorganic oxidizers have~~ oxidizer has an average particle size of 3 microns to 60 microns.

32. (Currently amended) The melt-pourable explosive composition of claim 15, wherein the at least one ~~or more inorganic oxidizers have~~ oxidizer has an average particle size of 5 microns to 20 microns.

33. (Cancelled)

34. (Currently amended) The melt-pourable explosive composition of claim 15, wherein at least 99 weight percent of the melt-pourable explosive composition comprises a combination of the at least one ~~or more organic binders~~ binder and the at least one ~~or more inorganic oxidizers~~ oxidizer.

35. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition undergoes an onset of thermal decomposition at a temperature that is at least 55.5°C higher than the temperature at which the melt-pourable explosive composition becomes pourable.

36. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a card gap value of less than 121.

37. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a card gap value of less than 101.

38. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a dent depth in a range of 0.754 cm to 0.922 cm.

39. (Previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition has a total energy of detonation of 7.1 kJ/cc to 8.7 kJ/cc.

40. (Currently amended) A melt-pourable explosive composition comprising:  
30 weight percent to 70 weight percent of at least one or more organic binders ~~binder~~ selected from the group consisting of mononitro aromatics and dinitro aromatics, the at least one or more organic binders ~~binder~~ collectively exhibiting a total energy detonation lower than trinitrotoluene and collectively having a total melting point in a range of 80°C to 115°C; and  
30 weight percent to 70 weight percent of at least one or more inorganic oxidizers, oxidizer, wherein the melt-pourable explosive composition is melt-pourable at a temperature in a range of 80°C to 115°C, undergoes an onset of thermal decomposition at a temperature that is at least 55.5°C higher than the temperature at which the melt-pourable explosive composition becomes pourable and exhibits a card gap value of less than 121, a dent depth in a range of 0.754 cm to 0.922 cm, and a total energy of detonation of 7.1 kJ/cc to 8.7 kJ/cc, and  
wherein at least 95 weight percent of the melt-pourable explosive composition comprises a combination of the at least one or more organic binders ~~binder~~ and the at least one or more inorganic oxidizers, oxidizer.

41. (Previously presented) The melt-pourable explosive composition of claim 40, wherein the card gap value exhibited by the melt-pourable explosive composition is less than 101.



42. (Previously presented) The melt-pourable explosive composition of claim 40, wherein the card gap value exhibited by the melt-pourable explosive composition is less than 81.

43. (Currently amended) The melt-pourable explosive composition of claim 1, wherein at least 99 weight percent of the melt-pourable explosive composition comprises a combination of the at least one ~~or more~~ organic ~~binders~~ binder and the at least one ~~or more~~ inorganic ~~oxidizers~~ oxidizer.

44. (Currently amended) The melt-pourable explosive composition of claim 41, wherein at least 99 weight percent of the melt-pourable explosive composition comprises a combination of the at least one ~~or more~~ organic ~~binders~~ binder and the at least one ~~or more~~ inorganic ~~oxidizers~~ oxidizer.